# REMARKS

Claims 1-20 are currently pending in the application. By this response no claims are amended, added, or canceled. Reconsideration of the rejected claims in view of the following remarks is respectfully requested.

## *Allowed Claims*

Applicants appreciate the indication that claims 6-9 and 11-13 contain allowable subject matter. However, Applicants submit that all of the claims are in condition for allowance for the following reasons.

## *35 U.S.C. §103 Rejection*

Claims 1-4, 10, and 14-19 are rejected under 35 U.S.C. §103(a) for being unpatentable over U.S. Patent No. 6,917,009 ("Rosenbaum") in view of U.S. Patent No. 6,520,407 ("Nieswand"). Claims 5 and 20 were rejected under 35 U.S.C. §103(a) for being unpatentable over Rosenbaum and Nieswand, and further in view of U.S. Patent No. 5,043,908 issued to Manduley et al. ("Manduley"). These rejections are respectfully traversed.

### Independent Claims 1 and 15 over Rosenbaum and Nieswand

The instant invention generally relates to systems for sorting articles according to information (such as addresses or barcodes) on the articles, and more particularly, to systems and methods for efficiently using available video encoding resources when automatic machine recognition (e.g., barcode reading and optical character recognition) does not successfully resolve information needed for sorting articles. Exemplary embodiments of the claimed

invention have been described in Applicants' previous responses, such that further description is

no believed necessary. Independent claim 1 recites, in pertinent part:

> ... determining whether an estimated time for video coding exceeds a determined threshold, if an imaging device does not resolve information needed for handling an article, and
> sending image data for unresolved information to a video coding station if the estimated time for video coding does not exceed the determined threshold ...

Independent claim 15 recites, in pertinent part:

> ... wherein at least one of the at least one programmable processor is programmed to determine whether an estimated time for video coding exceeds a determined threshold if the imaging device does not resolve information needed for handling an article, and sending image data for the unresolved information to the video coding station if the estimated time for video coding does not exceed the determined threshold.

The Examiner acknowledges, and Applicants agree that Rosenbaum does not disclose

*determining whether an estimated time for video coding exceeds a determined threshold*. The

Examiner asserts that Nieswand discloses determining whether an estimated time for video

coding exceeds a determined threshold if an imaging device does not resolve information needed

for handling an article at line 55-59 of col. 2 and lines 40-60 of col. 3. The Examiner concludes

that it would have been obvious to modify Rosenbaum in view of Nieswand, and that the

resulting combination teaches all of the features of the claimed invention. Applicants disagree.

Contrary to the Examiner's assertions, Nieswand does not disclose or suggest

*determining whether an estimated time for video coding exceeds a determined threshold, if an*

*imaging device does not resolve information needed for handling an article*, as recited in the

claimed invention. Nieswand discloses a mail processing system in which an OCR processing

unit 11 attempts to process a mail item completely (see, e.g., FIGS. 1-2). When the OCR

processing unit 11 fails, a job formulator 13 formulates and sends a job to the video coding device 20. At the input of the video coding device 20, a job-distributor 21 analyzes the job and assigns it to a suitable coding station 7. The selected coding station 7 is provided with the job data and presents the image of the mail item on a high-resolution monitor to the coder, which performs the required coding action. The result is then sent back to the response processor 14. The latter inserts the response data into the mail item context, deletes the unclear data and ensures that the recognition and interpretation process in the OCR processing unit 11 continues (lines 8-42 of col. 4).

Thus, in Nieswand, any mail item that cannot be resolved by the OCR processing unit 11 is sent to the video coding device 20, without discrimination. There is no teaching of *determining whether an estimated time for video coding exceeds a determined threshold* when the OCR processing unit 11 fails to resolve an address. To the contrary, there is no mention whatsoever of an estimated time for video coding or of a threshold value in Nieswand, much less of a comparison step that requires *determining whether an estimated time for video coding exceeds a determined threshold.*

The Examiner, however, is of the opinion that Nieswand's description at line 55-59 of col. 2 and lines 40-60 of col. 3 teaches *determining whether an estimated time for video coding exceeds a determined threshold.* More specifically, the Examiner states:

> The short predetermined time interval indicates a comparison with a threshold in order to correctly determine when the interval has expired.

(Office Action, page 3).

Notwithstanding, Applicants submit that this does not teach what is recited in the independent claims. In the passages cited by the Examiner, and at claim 10, Nieswand describes that the OCR processing unit 11 is provided downstream of a "rapid automatic online reader."

When the rapid automatic online reader cannot read the routing information of a mail piece within a predetermined short interval, the images of the mail piece are forwarded to the OCR processing unit 11. The rapid automatic online reader and the OCR processing unit 11 are both automatic processing units. Nothing in the passages cited by the Examiner refers to the video coding station, much less to an *estimated time for video coding.* Put another way, there is nothing in these passage about an estimated time or about video coding. Therefore, even assuming for argument's sake that the passages do "indicate a comparison with a threshold," the passages do not disclose or suggest *determining whether an estimated time for video coding exceeds a determined threshold,* as recited in the claimed invention.

Moreover, since neither Rosenbaum nor Nieswand teaches *determining whether an estimated time for video coding exceeds a determined threshold,* then neither can be reasonably be said to disclose or suggest *sending image data for unresolved information to a video coding station if the estimated time for video coding does not exceed the determined threshold,* as further recited in the claimed invention. The Examiner asserts that Rosenbaum discloses sending image data for unresolved information to a video coding station. Applicants do not disagree. In fact, both Rosenbaum and Nieswand disclose sending image data for unresolved information to a video coding station.

However, the claimed invention recites more than merely sending image data for unresolved information to a video coding station. More specifically, claims 1 and 15 recite *sending image data for unresolved information to a video coding station if the estimated time for video coding does not exceed the determined threshold.* The Examiner's explanation of the rejection ignores the latter portion of the recitation. Because neither Rosenbaum nor Nieswand discloses an estimated time for video coding, neither can arguably be said to disclose *sending*

*image data for unresolved information to a video coding station if the estimated time for video*

*coding does not exceed the determined threshold.* Therefore, no proper combination of the

applied art discloses or suggests all of the features of independent claims 1 and 15.

### Independent Claim 10 over Rosenbaum and Nieswand

Independent claim 10 recites, in pertinent part:

> ... determining whether an estimated time for video coding exceeds a determined threshold, if the imaging device does not resolve information needed for handling an article, and
> sending image data for the unresolved information to a wait queue until a determined release event or timeout occurs if the estimated time for video coding does not exceed the determined threshold,

As discussed above, no combination of Rosenbaum and Nieswand discloses or suggests

*determining whether an estimated time for video coding exceeds a determined threshold, if the*

*imaging device does not resolve information needed for handling an article.* Moreover, since

neither Rosenbaum nor Nieswand discloses an estimated time for video coding, neither can be

said to disclose or suggest *sending image data for the unresolved information to a wait queue*

*until a determined release event or timeout occurs if the estimated time for video coding does not*

*exceed the determined threshold.* Nor has the Examiner identified any such disclosure in either

of the applied references. Therefore, no proper combination of the applied art discloses or

suggests all of the features of independent claim 10.

### Dependent Claims 2-4, 14, and 16-19 over Rosenbaum and Nieswand

Applicants submit that claims 2-4, 14, and 16-19 each depend from one of allowable

independent claims 1 and 15, and are allowable by virtue of the allowability of the respective

independent claims. Also, the applied references do not teach or suggest many of the features of

the dependent claims.

Accordingly, Applicants respectfully request that the §103 rejection of claims 1-4, 10, and 14-19 be withdrawn.

### Dependent Claims 5 and 20 aver Rosenbaum, Nieswand, and Manduley

Applicants respectfully traverse the rejection of claims 5 and 20. Claims 5 and 20 depend from allowable claims 1 and 15, respectively, and are allowable at least for the same reasons as the respective independent claims. Moreover, the applied art fails to disclose or suggest the features recited in claims 5 and 20. More specifically, claim 5 recites, in pertinent part:

> . . . wherein the estimated time for video coding is comprised of a weighted average response time.

Claim 20 recites, in pertinent part:

> . . . wherein at least one of the at least one programmable processor determines the estimated time for video coding based on a weighted average response time.

In addressing claims 5 and 20, the Examiner implicitly acknowledges that Rosenbaum and Nieswand fail to disclose the above-noted features of claims 5 and 20. However, the Examiner asserts that Manduley discloses calculating an average response time, and that it would have been obvious to one of ordinary skill in the art to combine Rosenbaum and Manduley "in order to provide up-to-date information regarding mail pieces." Applicants respectfully disagree.

None of the applied references discloses or suggests a _weighted_ average response time. Nor has the Examiner identified any passage in any of the applied references that discloses or suggests a _weighted_ average response time. In fact, the Examiner fails to even address the word "weighted" in the explanation of the rejection. Instead, the Examiner merely asserts that Manduley discloses "calculating an average response time." However, claims 5 and 20 do not recite merely an _average response time_, but rather, recite a _weighted average response time_.

In contrast to the applied art, embodiments of the present invention determine a weighted average response time using a configurable weight factor. More specifically, the configurable weight factor is used to control the effect of a single measured response time on the overall weighted average response time. That is, if a single measured response time, for example, was very large, this may have cause an average response time to vary greatly. According to the invention, by using a weighted average response time, the effect on the weighted average response time is controlled and configurable.

None of the applied references discloses or suggests a weighted average response time, as described and recited in the claimed invention. Therefore, no proper combination of the applied art discloses or suggests *the estimated time for video coding is comprised of a weighted average response time*, as recited in claim 5, or *at least one of the at least one programmable processor determines the estimated time for video coding based on a weighted average response time*, as recited in claim 20.

Accordingly, Applicants respectfully request that the §103 rejection of claims 5 and 20 be withdrawn.

# CONCLUSION

In view of the foregoing remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicants hereby make a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 19-0089.

Respectfully submitted,
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